



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NORTHWEST AFRICA AND TIMBUCTOO.

BY

FELIX A. MATHEWS, UNITED STATES CONSUL-GENERAL AT MOROCCO.

PART I.

SUS, WADNOON, THE SAHARA.

That part of the western coast of Africa which lies between the latitudes of 20 and 32 degrees north, has been differently laid down in various charts, but perhaps never yet accurately, excepting the portion of coast from latitude 28° to $39^{\circ} 30'$ reconnoitred and surveyed by the commission on board the Spanish man-of-war *Blasco de Garay*, in 1878. The Spaniards, who fish on this coast eastward of the Canary islands, assure us that soundings are to be found quite across to the continent, and there is a tradition among the Arabs, that in very remote ages those islands formed part of the African continent. In support of this tradition, it may be observed that the aborigines of Lanzarote resemble in manners, in physiognomy, and in person the Africans of the Atlas, and retain some of their customs; and there is no doubt that the geological formation and vegetation of the Canary islands is the same as that of the Atlas mountains nearest to the Atlantic. North and south of the promontories of Gher and Noor the Atlas submerges into the Atlantic ocean, its crest rising again at no great distance from the coast, forming the group known as the Canaries, Lanzarote being one of said group.

That portion of the coast which lies between the above-mentioned latitudes is a desert country interspersed with immense hills of loose sand, which are from time to time driven by the wind into various forms, and so impregnate the air with sand for many miles out at sea as to give to the atmosphere an appearance of hazy weather. Navigators not aware of this circumstance never suspect during such appearances that they are near land until they discover the breakers on the coast, which is so extremely flat in most places, that one may walk a mile into the sea without being over the knees, so

that ships strike when at a very considerable distance from the beach. This shallowness is caused by the continual drift of the desert sands toward the sea. Added to this, there is a current setting in from the west toward Africa with unconceivable force, which has been the cause of numerous wrecks, many of which have never been known. The plundering Arabs, after taking everything portable from the vessel if the sea does not wash it to pieces, set fire to it in order that it may not serve as a warning to other ships which may be so unfortunate as to follow the same course. In such instances the crews have been made captives and either redeemed or sold in the interior.

The coast of Wadnoon extends a long way to the southward, nearly as far as Cape Bogador. The river Akassa, which often erroneously has been called in the maps the river Nun, and in some Daradas, is a large stream from the sea to the town of Nun, which is about fifteen miles inland and about two miles in circumference. From hence the river becomes shallow and narrow. It is to the southward of this river that the ships have been wrecked. Between Akassa and the province of Ait Bainaran, in Sus, is a peninsula extending into the ocean, resembling that on which Mogador is built, where are the remains of a fort erected by the Spaniards, but evacuated by them at the time they discovered America. They and the Portuguese, severally, afterward endeavored to obtain possession of it for the purpose of establishing a commercial factory, but the natives objected to the proposal, which probably was not made by the Government but only by some speculating individuals. Several attempts have been made by the Spaniards to establish themselves in this coast, and at the conclusion of the last war between Spain and Morocco, the so-called port of Santa Cruz de mar Pequena was ceded by Morocco to Spain, notwithstanding that the Sultan of Morocco has not even a nominal power over this country. In 1878, the Spanish Government steamer *Blasco de Garay*, left the Canaries for the adjacent coast in search of Santa Cruz de mar Pequena, but nothing was done, and since Mr. Mackenzie's operations have taken place.

This territory, which lies between Morocco and Timbuctoo (a portion of its coast I have briefly described), is divided into several sections or Kabiles, which are governed by various independent chiefs or sheiks, commonly called Ait-el-arbein (the people of the Forty),

meaning the number of chiefs who rule them. The principal among these chiefs is Sheik El-Houssain Ben Hisham, who possesses great influence in the councils of chiefs on account of his descent from an old imperial family, and also on account of the central territorial position which his tribe occupies. He therefore disposes of most matters in connection with trade of the country, and its relations with the adjacent territories on either side of Wadnoon is generally looked up to by all tribes, many of which are more numerous and even more powerful than his.

The population of this country is naturally peaceful, though often called into strife, either with their neighbors or other marauding tribes whose object is chiefly plunder.

Their religion is Mohammedan, and their chief pursuits are agriculture, cattle, farming and commerce.

The soil is naturally fertile and its great mineral riches are still unexplored, except by some few Talebs who, by the aid of small crucibles and plain chemical substances, manage to purify the loose surface ores and bring to market small quantities of gold, silver and copper. It is the specimens of ores which were a while ago sent to London which encouraged British traders to try to make a settlement in the neighborhood.

The trade of the country is mostly done at markets which take place in different districts once a month, between March and October, which markets or fairs are called "almugars" and generally bear the name of the patron saint of the district wherein they are held.

Through its geographically central position, Wadnoon is the half-way house for Morocco traders, who flock there during the seasons of the fairs for the purpose of meeting the "acabahrs" or caravans which come from the Soudan district and Timbuctoo, all of which go no further than Wadnoon, where they do their bartering on a large scale.

These caravans of 1,000 to 10,000 men each generally bring with them gold in small bars, in dust and in ornaments or trinkets (mostly taken from the dead and prisoners in the numerous encounters which are constantly taking place between the negro tribes about Sahara), ivory, ambergris, ostrich feathers, skins of wild animals and dromedaries. Besides this, they also bring a large number of

slaves of all ages and sexes, which are either sold or bartered with the Morocco traders, who, on the other hand, bring into the market sugar, tea, iron in bars, arms, sulphur, saltpetre, cotton goods of all classes and chiefly blue salampores and baft (dyed cottons). These articles form the staple trade carried on between the caravans which come from both sides to meet at Wadnoon; but in addition to these the country itself produces in abundance almonds, gums of various classes, ostrich feathers, ambergris; also gold, silver and copper, wool, cattle and grain, all of which, excepting the last two articles, are bought or bartered by the Morocco traders and taken to Mogador for sale.

In former times there existed a kind of treaty between the Sultan of Morocco and the Wadnoon chiefs, who were his tributaries, paying him an annual tribute, for which they received in exchange grants of free houses for residence and stores for their goods, as well as exemption of export duties on parcels of goods which belonged to the sheiks.

Since the imprisonment and captivity of Mr. Butler, the Sultan broke faith with these sorts of republics and imprisoned some of the men they sent to transact their business, upon which they also ceased or reduced direct intercourse with his country, and the tributes formerly paid are now reduced to two slaves, which Sheik-el-Houssain sends yearly to the Sultan for the sake of keeping up their correspondence as friends and kinsmen. But while Morocco continued in its retrograde course of action, the independent sheiks of Wadnoon persevered in their good faith and principles by encouraging the traders of Morocco that came to their country and allowed them to traffic unmolested, notwithstanding the ill-usage inflicted by the Sultan of Morocco upon the men from Wadnoon.

The most extraordinary feature which characterizes the "socks" fairs is that many men from different tribes and districts who happen to come are often on a footing of animosity and even have family blood to revenge, but so much respect is paid to the interest of commerce that men who meet their enemies at the fair or on the way to and from it, are neither molested nor allowed to molest until the fair is over.

Unfortunately for Morocco, its system of government has lost this mainspring of its commerce, as, owing to the unsafety of the

roads leading through Morocco, very few if any merchants venture to go through Haha or Intuga, two provinces famous for their lawlessness and misgovernment, the Governors of which not only tolerate highway robbery and pillage of travellers, but even go so far as to participate in the spoil; in fact, many gangs of robbers are known to be the Governors' own men. By these means trade with Wadnoon and even with the Sus district has been crippled, and Mogador merchants have lost not only the principal outlet for their imports from Europe, but also the source whence they derived the richest produce for export.

The Wadnoon people, ever active and intelligent, have seen their trade gradually falling off and lost, have spared no opportunity to create other connections for developing the resources of their country, and therefore hailed with joy the arrival of some Spanish fishing smacks, which now and then visited their coast. Negotiations were opened with the Canary islands as early as 1859, which, however, were of short duration owing to the bad faith of the Spanish coasters, who took advantage of the confidence placed in them by the Wadnoon people, and left without paying for the sample cargoes they took, and in cases where barter was made, the goods delivered were never up to the mark of samples that were shown. This unfortunately created a bad impression on a race of people whose habits and customs compel them to give and take implicit confidence, but this once shaken, they have become very chary in their dealing with Europeans, though never ceasing to court the latter's connection.

Many reconnoitering voyages have been made by Spanish, French and English vessels, but nothing of a serious nature was ever concluded as to future commercial relationship, except the assurance repeatedly given by the natives that they would gladly welcome any trading community which would come in good faith to establish commercial relations.

The Sultan of Morocco, instead of correcting the evils which bring about so much misery to this rich, but most unfortunate and misgoverned country, by adopting stringent measures and laws and punishing malefactors, endeavors to put every obstacle in the way of progress of the neighboring republics, and for that purpose adopts the infallible mode of influencing all Mohammedans by in-

citing, through large tribes, some of the fanatical heads of the Musulman Church to preach the holy war against all whosoever encourages relations with Christians. Although this means has, to some extent, obstructed the path of negotiations in many instances, it has, nevertheless, not checked the enterprising Mr. Mackenzie, an English engineer, who visited this coast as early as 1872, in company with a shipowner named Campbell. They travelled through the whole country, gleaning information as they went along, and no doubt this journey gave birth to Mr. Mackenzie's enterprise in 1878.

Mr. Mackenzie very wisely selected a deserted part of the coast, far from every inhabited district and offering a safe landing. Here he established correspondence with two sheiks, who, though very poor, yet possess some influence over a certain portion of the population. These two men, who are Mr. Mackenzie's pensioners, have procured him sample cargoes of wool, gums and other produce at very high prices, which Mr. Mackenzie took, either through inexperience as to the intrinsic value of the goods or in order to entice further operations on a large scale by giving good value for the first lots.

From all we know, Mr. Mackenzie has no experience as to the value of goods, and it is believed the trade he does is pursued more as a cloak to his real intention to be the first to establish a British settlement in that part of Africa for the introduction of British manufactures.

Some three hundred operatives were brought from the Canaries in June, 1880, for the purpose of building houses and fortifying the place. Meanwhile his trade has been transacted on board a hulk anchored at a small distance from the shore, which serves the purpose of store as well as residence for the men. The hulk is armed with four Gatling guns, besides small arms. The steamers that call there landed and took their cargoes on this hulk.

The Sultan of Morocco made several futile attempts to frustrate the purposes of the English company, but through its perseverance and also through the scarcity of fanatical influence, which is the Sultan's most efficient means, the company has carried on its work unmolested for some time. In the early part of 1880 some English merchants of Mogador opened a correspondence with the sheiks of Wadnoon, who deputed five of their number to treat

with the Englishmen. An active overland correspondence ensued about terms of monopoly and other details until May, when an unexpected event rendered it impracticable to carry out their object.

A London firm, connecting itself with three houses at Marseilles, started an African expedition, and having chartered the steamer *Anjou*, they loaded her with sugar, tea, cotton goods, provisions, timber, sulphur, gunpowder and arms.

Three of the merchants sailed by her for the Canary Islands, whence they were to take some experienced men who had been sent from Mogador for the purpose of assisting in the negotiations. It just happened that one of these men was beforehand employed by the English traders who had been in correspondence with the sheiks, and having acted as a spy on his new employers, betrayed all their movements to the merchants at Mogador, and these quietly informed the Sultan's authorities of the project on foot. The Sultan, never backward in any movement whereby his perfidious intentions may be furthered, sent the Sheik El-Houssain a large sum of money, saying it was as indemnity for robberies of the sheik's property committed on the Sultan's territory, asking the sheik at the same time to oppose the landing of the *Anjou*'s expedition.

Thus it was that, by the time the *Anjou* had reached Sffuy, a small creek on the coast of Ait-Ba-Auran, they found the beach swarming with armed men from all tribes, all of whom made the convened signals for the people to land ; this, however, they would not do, but sent one of the employes to reconnoitre and report, and on his return he said that several chiefs invited them to come on shore and treat with them, but Sheik El-Houssain was not there. Upon this, a courier was despatched to the sheik, who declined to encourage any enterprise whereby his kinsman and neighboring sovereign would be prejudiced. The reply brought about a serious dispute between the partisans of the various sheiks, finishing up by a broil at arms, which at once decided the *Anjou* to put off for Mogador, where part of her cargo was landed, the sulphur, powder and arms being carried back to Marseilles.

At the same time the Sultan circulated the rumor of his intention to open the port of Agadir at the extreme south of his coast, which

rumor, like those of all the Sultan's good intentions, proved to be a *canard*.

Since the failure of the *Anjou*'s expedition, the Sultan of Morocco has unceasingly kept up the fermentation at Wadnoon, and eventually succeeded in getting some malefactors to set on fire the wooden buildings which Mr. Mackenzie had on the shores of Cape Juby, and this occurrence having been the cause of ceasing communication, Mr. Mackenzie went to England, and his representatives decline to traffic with the natives (who have brought to the spot quantities of wool and other produce) until his return, which is daily expected.

At present Mr. Mackenzie's men are busily engaged building a pier for facilitating the landing and embarking of goods, and sheltering vessels against the breakers; and it is supposed that, in spite of the Sultan's behests, England tacitly encourages the establishment of English settlers on the coast of Africa.

There is little doubt but that the establishment of direct relations with the coast of Wadnoon would tend materially to benefit all concerned, as the Sultan's influence there cannot last much longer. The agitation caused by the influence he brings to bear upon the fanatical portion of the natives will gradually subside, in the presence of his failing to carry out the reforms and improvements in his dominions, the promises of which were the principal temptation held out to those who carried out his desires, but who must now be undeceived as to who deserves more of their confidence, whether the Europeans who came to settle there for the benefit of the country, or a Sultan whose perfidy has proved more than once a source of great loss to themselves.

The more sensible among the sheiks are now doing their utmost to bring new settlers into their territories, and we hear that Sheik El-Houssain has erected some three hundred shops for Jewish traders who come from Morocco to attend the fairs (or socks).

Others are in regular communication with English, French and Spanish firms, endeavoring to establish firm and lasting connections, but so far have not met with any, except Mackenzie, who would carry out their desires.

The position taken by Mackenzie in the extreme south of the Wadnoon coast leaves room for other settlements along the coast

nearer to the more populated part of the territories with which trade could be opened forthwith, and the chiefs, we know, have gone so far as to conclude treaties of commerce and give hostages as to the fulfillment of their part of compacts.

It will be necessary for merchants of any nation that may wish to open the trade to have the approval and support of their Government in order to offer the natives such substantial guarantees as they justly require, and also that in case of any attacks from Morocco they may find a nation that would exert its influence in their favor.

Having just mentioned the Sultan's feigned rumor of opening the port of Agadir, it will not be out of place to describe *en passant* this port and the coast southerly to Wadnoon. Agadir, or Santa Cruz, called in the time of Leo Africanus, Guertguessem, is the last port in the Emperor's dominions. The town, which stands on the summit of the mountain, is strong by nature, and its walls are defended by obsolete batteries. The principal one is at a short distance from the town, down the mountain, and was originally intended to protect a fine spring of water close to the sea ; this battery also commands the approach to the town both from the north and south, and also the bay. The town called by the Portuguese Fonti is still standing at the foot of the mountain, and the arms of that nation are still to be seen in a building erected over the spring.

Agadir, or Santa Cruz, was walled around and strengthened by batteries in 1503 by Emanuel, King of Portugal, but it was taken from the Portuguese by the Moors in 1536.

The Bay of Agadir is probably the best road for vessels in the empire, being large and well defended on every side from all winds. It abounds in fish.

In the reign of Mulay Ismael, Agadir was the centre of a very extensive commerce, whither the Arabs of the desert of Sahara and the people of Soudan resorted to purchase various kinds of merchandise for the markets of the interior of Africa. It was called bab-el-Soudan (gate of Soudan), and caravans were constantly passing to and from Timbuctoo. The natural strength of the place, its imposing situation, the wealth of its inhabitants, excited the jealousy of the Emperors, which was confirmed in 1773 by the inhabitants becoming refractory, and Taleb Solh, the Governor,

refusing to deliver it up. On learning this, the Sultan, Sid Mohamed, marched with an army from Morocco against it. The place did not make a long resistance, for the rebellious Governor yielded to the persuasions of the chiefs to accept the Sultan's offer of pardon upon yielding his allegiance.

He accordingly repaired to Tamaraet, the Emperor's headquarters, and was immediately imprisoned ; but procuring, through a friend, a penknife baked in a loaf of bread, he committed suicide.

The town having surrendered, the merchants were allowed a short time to collect their effects and proceed to Mogador, where the Emperor encouraged them to build houses and carry on their trade. Since then the most important port of Morocco has been closed to all foreign trade.

Beyond Agadir there is no port frequented by shipping ; there is a tract of coast, however, which holds out great encouragement to commercial enterprise, and secure establishments might, with tact, be effected upon it, amply remunerating the enterprising speculators.

The people of Sus are also well disposed towards Europeans, and the communication and short distance between this place and the province or districts where most of the valuable products of Barbary are raised and foreign manufactures consumed, render it peculiarly more adapted to trade than any other port of Morocco. Agadir is twenty-one miles south of Cape Gher, in latitude $30^{\circ} 35'$.

From Agadir, southward, the sovereignty of the Sultan of Morocco slackens. The tribes, like so many republics choosing their chiefs, and the difficulty of passing an army over that branch of the Atlas which separates Sus from Haha, secures to these tribes their arrogated independence.

There are but two roads fit for shipping between Agadir and Cape Bogador, an extent of coast, for the most part desert, of nearly two hundred and fifty miles, the whole of which is inhabited by the various tribes of Arabs who have emigrated at different periods from the interior of Sahara, and pitched their tents wherever they could find a spot capable of affording pasture to their flocks. All along this most dangerous and deceitful coast, there are rocks even with, or very near the surface of the water, over which the waves of

the Atlantic ocean often break with fearful violence, and the rapidity of the currents, which invariably set in towards the land, too often have driven vessels ashore here.

We see these people here, their camels, horses and other beasts living together with men, women and children indiscriminately, and they are almost continually at war with their neighbors, which originates in family quarrels. Plunder keeps them incessantly in motion, and they traverse the desert of Sahara to Soudan, Timbuctoo and Wangara, with as little preparation as we should make to go from New York to Philadelphia. This people, living in independence, indulge in dress and use many European commodities which on opening the coasting trade would rapidly expand to great importance in kind and in variety, as they are ready to adopt the use of foreign articles of manufacture.

They raise in abundance gums of various description, almonds, wax, wool, skins and ostrich feathers. There is the desert horse, "shrub-el-rrah" (wind-bibber or drinker of the wind). This horse is fed only on camel's milk and is principally used for hunting ostriches, which are run down by it and then captured. About twenty Sahráawâns mounted on these horses follow the foot-marks of the ostriches until they come in sight of the birds, when they rush at full speed, the bird finding her wings an impediment to her progress against the wind, turns towards the horsemen which are coming up one after the other, and after escaping the first or second, is brought down by the third or fourth or some of those that follow.

The Sahráawâns carry double-barreled guns, procured at the French settlement of Senegal, but when after the ostrich they rather trust to their zerwata, which is a stick about two feet long and three inches in circumference, taken from the alk-Soudan tree, which produces the Senegal gum, being a hard, close-grained, heavy wood ; this they throw with extraordinary dexterity at the legs of the birds, bringing them down invariably. Having cut the throat according to the Mohammedan practice, they pluck off the feathers and divide them, as well as the carcass, into different portions, each man taking his share. The feathers are generally sold to the agents of merchants at Wadnoon or at the fairs or socks.

For the information of merchants, the method of purchasing ostrich feathers in South and Southwest Barbary is as follows. According to custom from time immemorial, a quintal or 100-lb. weight is thus distributed :

75 lb. small black feathers.

25 " { Zumar
 { Lobar
 { Long black } of each, one third.

The zumar feathers are preferable to long black, and these to lobar. To this quintal of assorted feathers is added 6 lb. 4 oz. of panable or fine feathers, which are divided into the following proportions :

	lbs. ozs.
No. 1. Surplus face feathers, called Ugub, No. 1	2 0
" 2. Fine face feathers, of which three count for two of No. 1, so that 3 lb. of No. 2 being delivered, count for	2 0
" 3. Face feathers, valued two for one surplus face, so that 4 lb. count for	2 0
" 4. Common face, 3 lb. count for.....	1 0
To each quintal	<u>7 4</u>
Surplus	0 12

These 12 ounces over the quintal are brought into imaginary pieces or single feathers, thus : 4 surplus face feathers are calculated to one ounce, so that 12 oz. will make 54 feathers.

4½ surplus feathers are calculated 1 oz.

100 surplus feathers are calculated 22½ ozs.

But custom makes 100 feathers count for 22 oz. without the fraction before mentioned.

The foregoing is the mode of purchasing this article of commerce, which requires much practice before the purchaser will be free from imposition.

The competition among the Jews and the almost entire monopolization of this trade by those people has enhanced the value, for by contriving to exclude the Christians as much as possible from this commerce, they are often induced to trade beyond their capital, overstocking the market, making a forced trade, and throwing the

profits which before were reaped by the Europeans into the hands of the natives.

During the year 1879-80 only thirty-three quintals of ostrich feathers passed through the custom house, valued at \$105,750. It is supposed that about two-thirds more have been smuggled out of Morocco, and the amount exchanged to the Spanish coasters calling at the Wadnoon coast is not known. Ostrich feathers are also introduced into Algeria through Oushdah, all from the Wadnoon districts and North Sahara.

From Tamdant to the line between Sus and Wadnoon, as well as in the oasis of the Sahara, the "lukseb" or sugar-cane grows spontaneously; but the natives have lost the art of making sugar, for this cane was largely cultivated in the palmy days of Tamdant, when sugar was extensively manufactured.

It may not be out of place, with regard to the growth of sugar-cane in the South Barbary districts, to insert in this report what appears to me to be the most ancient direct description of the process for obtaining granulated sugar, for their skill in the production of which article the Moors were celebrated in former times. They also introduced the article into Spain, for it is not generally known that sugar has been one of the productions of Spain as well as of Morocco and South Barbary for at least nine hundred years, and that the process of planting canes, grinding them and granulating the juice has been very little improved in Spain, with the exception of the use of new machinery.

In Morocco and South Barbary, as I have already stated, it has been lost, no sugar being manufactured at the present time.

The following is a translation of an Arabic author on agriculture, a Moor, Ben Mohamed Ben Ahmed Ben el Aucum, who wrote about the year 1140. In his direction for the mode of planting the sugar-cane, he quotes the authority of another author of his nation, who is known to have written in the year 1073, called Abu Omar Ben Hajaj. As the fact is interesting, I shall quote a few passages on the subject :

"The canes should be planted in the month of March in a plain sheltered from the Levant or east wind, and near to water ; they should be well manured with cow dung, and watered every fourth day till the shoots are one palm in height, when they should be

dug round, manured with the dung of sheep, and watered every eighth day till the month of October. In January, when the canes are ripe, they should be cut into short junks and crushed in the mill. The juice should be boiled in iron cauldrons, and then left to cool till it becomes clarified ; it should then be boiled again till the fourth part only remains, when it should be put into vases of clay of a conical form and placed in the shade to thicken ; afterwards, the sugar must be drawn from the vases and left to cool.

"The canes, after the juice is expressed, are preserved for the use of horses and camels, who eat them greedily, and become fat by feeding on them."

The soil of the district above-mentioned is well adapted for cotton and tobacco (and will grow all the vegetable productions of the Southern States of America) ; but little of it is cultivated. Being a rich sandy soil, the almond-tree grows in great abundance ; in the like manner the olive. Oil is manufactured largely by the natives from the olive and from the argan tree, or "eleodendron," peculiar to this country, which grows in all the extent comprised between the 27th and 32d degrees of north latitude, uncultivated in extensive forests of luxuriant verdure. This tree is very little known in Europe, and is unknown in America. It much resembles the walnut tree, and produces a fruit similar to the almond. The seed is covered with a very thin brush, and when the fruit is ripe it shines in the dark like a glow-worm. The natives gather the fruit, and crush the stones, which yield a light yellowish oil which is very much used for cooking in preference to that obtained from the olives. The tree is bushy, and grows to the size of a large spreading oak.

The cork tree is found in almost every forest north and south of the Atlas.

The yellow boxwood is also rather plentiful in these districts where the orange tree thrives. The stick liquorice is so abundant that it is called (ark Sus), the root of Sus.

The date, which here in Sus begins to produce a luxurious fruit, is found in perfection on the confines of the desert.

At Akka and Tatta the palm or date tree is very small, but extremely productive, and although the fruit be not made an article of trade as at Tafilet, it is exquisitely flavored, and possesses vari-

ous qualities. The most esteemed kind is the Butube ; the next is the Buskrie. So soon as trade is opened on this coast the date will figure amongst the first articles of exportation, owing to its abundance and extra quality.

Sus and Wadnoon produce more almonds than all the other provinces of North Africa collectively, but owing to the distance overland to bring this fruit on camels' back to a seaport (Mogador) only 13,973 quintals, valued at \$230,185, was exported in 1880.

Gum amarand (a red gum useful for varnishes), gum arabic, aurovar gum, Soudan and Senegal gum are first found in these regions; but for similar reasons of a want of settlement on the immediate Atlantic coast, only 6,511 quintals of gum, valued at \$104,350, was with difficulty transported over the Atlas into Morocco and shipped at Mogador in 1880 for the British and French markets. Wax is produced in great abundance, and notwithstanding the high camel freights and long distance, about \$50,000 worth of this article was brought into Morocco and exported to Europe during the same period. Also gum sandrac and gum euphorbium, wild thyme, wormseed, orris-root, orchilla weed, tobacco, keef and coloquintid. Indigo abounds, but its culture is almost abandoned.

Of gold dust only \$35,000 of the amount brought over the Atlas from these provinces was exported to England last year.

Saltpetre of a superior quality, antimony, silver and copper are found here and about Elala and Shtuka. The silver mines in a virgin state are numerous. The resources and productions of this territory can only be well developed and made the source of great commercial speculations, carried to Timbuctoo, Jinnie and those rich central districts, by the establishment of settlements, with wisdom and perseverance, on the most convenient sites for shipping in this extensive coast.

Commerce between this country and the United States was carried on through the port of Mogador in Morocco since the year 1792 ; it was impeded by a dispute between Morocco and America in the year 1804 and 1805, which, however, was amicably adjusted, and the trade resumed in 1806.

Vessels sailing from Salem, Boston and other parts of the United States, with West Indian American produce, called at Mogador and received in return the various articles of South Barbary produce,

and by these means the agents of American merchants established at Mogador were enabled to undersell the British in all West India and American goods, and even in those of the East Indies.

During the early trade of the United States with West Africa, the American brig *Commerce*, Capt. James Riley, was shipwrecked in August, 1815, when the captain and crew were made captives by the Arabs of Wadnoon, and released after much suffering and labor. Since, the American direct trade declined, and at last ended at the beginning of the civil war.

PART II.

AN ACCOUNT OF TIMBUCTOO.

From time immemorial Timbuctoo has been considered as the great emporium of Central Africa, having carried on an extensive and lucrative trade with Barbary and other North African maritime states, from Morocco to Egypt.

This trade of late years has somewhat declined, and has been carried on by means of acabahrs, or accumulated caravans, which cross the desert of Sahara between the months of September and April inclusive. The largest caravan which crosses the desert is the one from Morocco, and proceeds from Teneluf, in the confines of the desert, once a year in the month of October, and consists of about ten thousand camels, of which only twenty per cent. carry merchandise. The rest proceed from Tandeney, in the centre of the desert, where they load with salt.

Besides this, there are many other caravans composed of one or two hundred camels engaged in transporting the various articles of commerce. The effects which they take to Timbuctoo and the Soudan are various kinds of linens, cotton goods, white and blue salanpores, American cloth and long cloth, sugar, tea, glasses, coral beads, amber beads, pearls, shells, silks, brass nails, wool and cotton manufactures of Fez, and Morocco nutmegs, clove and ginger, cowries and a considerable quantity of tobacco, keef and salt.

The produce of Soudan returned by these caravans for the above

articles, consists in gold dust and gold trinkets from Wangara and Jinnie, ivory, ostrich feathers, gum of Senegal, gum arabic, incenses, Soudan blankets, and slaves from Wangara and Housa.

The value of each camel-load is estimated at \$250, consequently the value of the merchandise transported annually from Morocco by the great akabahr may be estimated at \$500,000 and at \$150,000 that of the small caravans, amounting to \$650,000, the total value of the merchandise conveyed to Timbuctoo. Of this sum seventy-five per cent. belongs to the camel drivers of Sus, who transport salt from Tandeny to Timbuctoo, and twenty per cent. of the camels are sold at this place, as the return goods being light, they require a much less number of camels to perform their traverse journey to Morocco.

The great akabahr is dissolved at Timbuctoo, the merchants returning in distinct groups and by various routes.

At present there are four frequent routes from Timbuctoo to Wadnoon, which are:

- 1st. By Tisity and Wallatta.
- 2d. By Hammada, Teneluf, Tzidy, Tandeny and Arawan.
- 3d. By the Boryle in the Ulad-Bu Oxra, Awin, Tirkis, Aits, Uxa and Wallatta.
- 4th. By Amayett, Teeky, Ulad, Ulad Tedlary, Ulad Dlinsa, Tiris, Waddy, Yedama and Wallatta.

According to information from merchants and from Ali el Saharawi, the oldest desert guide, the itinerary in going with the Begowy (desert camels) is as follows :

From Wadnoon to Tiris.....	12 days
“ Nammandy to Yedama	4 “
“ Yedama to Wallatta.....	4 “
“ Wallatta to Timbuctoo	10 “

	30 days

With the ordinary camels from sixty to ninety days are employed in crossing the desert.

The tribes inhabiting the territory between the river Draa and the Tiris are independent and warlike, and they will oppose the access of Europeans into the interior of their country. The authority of the sons of Sheik Ben Beiruk only reaches to the Tiris.

The country extending from Wad Draa (river Draa) to Sackia el Hamra is very fertile; from here to Cape Bogador it is composed of sandhills, and from this cape it descends to an immense plain called El Yuff, extending some five hundred miles, which with desert camels they traverse in twelve days. This plain is one hundred and twenty miles in width.

The boundaries of El Yuff are inhabited during four months of the year, in the spring, when the Arabs take their cattle to pasture towards the Gralatzy, on these grounds fertilized by the rains of winter. The amaranth or gum arabic plant is found on the plains of El Yuff.

The tribes which encamp on the El Yuff during the spring are those from Dibushaty, Ulad-Ahal-Atzmanu, Taganet, Ahal-Brik-Allah, Zoowich, and from the West Ahal-el Hodh, Ulad Dleim, Arusin and Ulad Zawari.

The three great tribes of the desert are the Arab Hassan, El Zonaya, and El Lahma. The El Zonaya is a quiet and peaceable tribe, the El Lahma is warlike and rich, and the Arab Hassan is a tribe of dreadful reputation, living off the plunder of the caravans which they continually attack.

The ostrich, antelope and gazelle make their appearance on the plains of the Yuff soon after the accumulated rains of winter are absorbed. During this season the most valued ostrich feathers are gathered.

Fresh water is found near the surface of the ground from El Yuff to Yedama, from Yedama to Wallatta the water found is salt, and from Wallatta to Timbuctoo the water is again potable near the surface.

It is asserted by those who have crossed the desert during the last forty years, that the great fatigues and mortality of the transit have lately very much diminished. The Arabs attribute this improvement to the free use of tea, which of late has been introduced in all the caravans. They also maintain that the travelling conditions of the desert are much improved, the water in the skins lasting longer, as for some unknown reason the hot winds denominated "shume" are not so violent as in former periods.

In 1815, a caravan, proceeding from Timbuctoo to Tafilet, encountered the terrible hot winds, so violent that the water in their

skins was exhaled. Disappointed in not finding water at one of the usual watering-places, horrible to relate, the whole of the persons belonging to it, 3,500 in number, besides 2,000 camels, perished of thirst! Calamities of this sort account for the vast quantities of human and other bones which are found mingled together in various parts of the desert.

The intense heat of the sun, aided by the vehement and parching wind driving the loose sand along the boundless plains, gives to the desert the appearance of a sea, the drifting sands resembling the ocean waves; hence aptly denominated by the Arabs (*El Bahar bella maa*) a sea without water.

In their tiresome journey, the akabahrs do not proceed in a direct line across the trackless desert to their destination, but turn occasionally eastward or westward, according to the situation of certain fertile, inhabited and cultivated spots, interspersed in various parts of Sahara, like islands in the ocean, called by the Arabs *El walis* (oasis). These serve as watering places, as well as to refresh and replenish the hardy and patient camel. The akabahrs rest on these oasis several days.

The akabahrs cross the desert under convoy, the "stata" being two or more Arabs belonging to the tribe through whose territory the caravan passes. Thus, in passing the territory of Ulad-el-Hodh-Abbusebah, they are accompanied by two sebayhees or people of that country, who on reaching the confines of the territory of Ulad Deleim, receive a remuneration, and return, delivering them to the protection of two chiefs of Woled Deleim, these again conducting them to the confines of the territory of the Moraffra Arabs, to whose care they deliver them, and so on, till they reach Timbuctoo. Any assault made against the akabahr during this journey while in charge of the stata aforesaid, is considered an insult to the whole clan to which the stata or convoy belongs, and for which they never fail to take ample revenge.

Besides these grand accumulated caravans, there are other flying caravans which cross the desert in much less time ; they take with them a sufficient number of female camels (*Niag*), to supply them with food, they living altogether on the milk of that animal.

It is not ascertained when the communication between Barbary and Soudan was first opened, yet it is certain that the enterprising

expedition of Muley Arsheede, Emperor of Morocco, in 1670, encouraged the exchange of commodities and caused the establishment of the company of Morocco merchants from Fez, as well as that of their factory at Timbuctoo, which continued to increase and flourish until of late, when it declined.

Sid Ali, on his flight from Muley Arsheede, after obtaining permission from the negro king of Bambara, settled with his numerous followers at Timbuctoo and established a Moorish garrison, until the death of Muley Arsheede, when he returned to Barbary. Muley Ismael, Emperor of Morocco, established his power in Timbuctoo, and met with no opposition in putting that place under contribution. Having sent fresh troops to occupy the Moorish garrison there, the inhabitants were glad to make a contribution in exchange for the protection and power which it afforded them, for, previous to this, they had been subject to continual depredations from the Arabs of the adjacent country, to whom they paid tribute as a security to their caravans, which were constantly passing the country of these Arabs, who are of the race of Brabeeshe.

In the year 1727, Muley Ismael died. After his decease the tribute was not regularly transmitted, and his successors, having no means of exacting it, it was entirely discontinued to this day. The Moorish garrison, too, intermarrying with the natives and dispersing themselves about the vicinage, has given to the latter that tincture of Mussulman manners which they are known to possess, their descendants forming at this period a considerable portion of the population of Timbuctoo.

The city of Timbuctoo, at present in much decline and less populous, is situated on a plain surrounded by sandy eminences, about twelve miles north of the Nile el Abeede (River Niger) and three days' journey from the confines of the Sahara ; the city is about twelve miles in circumference, but without walls.

The town of Kabra, situated on the banks of the river, was its great commercial depot or port. By means of a water carriage east and west of Kabra, great facility is given to the trade of Timbuctoo, from whence the various articles of European as well as Barbary manufactures brought by the akabahr from the North of Africa (now in less quantities than before) are distributed to the

different kingdoms and states of Soudan and the south. This great mart is resorted to by all nations of Central Africa, whither they bring the various products of their respective countries to barter for the European and Barbary manufactures.

The main circulating medium at Timbuctoo is (tibber) gold dust.

The houses of Timbuctoo have for the most part no upper apartments. They are rather spacious and of a square form, with an opening on the centre, towards which the doors open ; they have no windows, but the doors are lofty. Contiguous to the entrance door is a building consisting of two rooms, called a duaria, in which visitors are received and entertained, so that they see nothing of the women. The men are excessively jealous of their wives.

The kings, since the death of Muley Ismael, are the sovereigns of Bambara. The name of the present potentate is Said Ben Woolo; he is black and a native of Jinnie, his usual place of residence, though he has three palaces in Timbuctoo.

Many of the civil appointments at Timbuctoo, since the decline of the authority of the Emperor of Morocco, have been filled by Moors of Maroquin origin, but the military appointments have been entirely among negroes of Bambara. The inhabitants are also for the most part negroes, possessing much of the Arab hospitality, and pride themselves in being attentive to strangers.

The various costumes exhibited in the market-places and streets indicate the variety and extent of the commercial intercourse with the different nations of Central Africa.

The religious toleration in this country is complete. Every one is allowed to worship without restraint, according to the religion of his father.

The police of this extraordinary place is extolled as surpassing anything of the kind in North Africa. Robberies and housebreaking are unknown.

The government of the city is entrusted to a Diwan of twelve Alemma, or men learned in the Koran, and an umpire, who retain their appointments, which they receive from the King of Bambara, three years.

The civil jurisprudence is directed by a Cadi, who decides all

judicial proceedings according to the laws of the Koran; and has twelve talebs or attorneys in attendance.

Until the year 1804 no Jews were permitted to enter the town, owing to the extreme jealousy of the individuals of the Moorish factory, whose avarice induced them to exclude every person from sharing their emoluments.

The climate of Timbuctoo is much extolled as being salubrious and extremely invigorating. Men at the age of eighteen have their wives and concubines. It is a disgrace for a man who has reached the age of puberty to be unmarried.

The accommodations for travellers at Timbuctoo are very simple; camels, horses, drivers and merchants rendezvous at a large house, having an open space in the middle round which are built rooms sufficiently large for a bed and low table. These inns are called Fondaks, and each merchant hires a room or more, until he has exchanged his merchandise for Soudanic produce, which he endeavors to accomplish by autumn, in order to be ready for the akabahrs, either to proceed to Morocco, Cairo, Jeddah or elsewhere.

The soil about Timbuctoo is generally fertile, and near the river produces rice, millet, Indian corn and other grain; wheat and barley grow on the plains. Coffee grows wild here, as does also indigo, which they use in their various cotton manufactures. Honey and wax are abundant, but neither are transported across the desert; the natives use the former for food and latter for candles.

There is a supply of fish from the river about Kabra.

The gold mines, which lie south of the river, belong to the king, and are worked by Bambareen negroes. These mines are reported to be extremely rich.

In a country like this, as the Africans are ignorant of geography or any other science, it is very difficult to attempt to give the exact geographical bearing and distance of places from Timbuctoo; but from the several accounts at different times received from respectable people who have resided at Timbuctoo and travelled across Africa, according to their journeys at the usual rate of $3\frac{1}{2}$ miles per hour, it appears to be situated 1,500 miles S.S.E. of Fez; 1,100 miles about S.S.E. of Akka, Tatta and Wadnoon; 1,300 miles in nearly

the same direction from Morocco; 1,300 miles from Taflet. It is also about 230 miles eastward of the City of Jinnie, and 1,000 miles east of Houssa.

Dr. Oscar Lenz, the distinguished German traveller, who is now at Tangier on his return from his remarkable journey from Morocco to Timbuctoo and Senegal, obtained through his Minister at this place letters of recommendation from the Emperor of Morocco which were of the greatest service to him on his perilous journey, which he undertook under the patronage of the Berlin societies. Starting from Tetuan, he visited the cities of Fez, Mequinez and other cities of Morocco. He crossed the desert of Sahara as a Turkish physician, Hakem Omar Ben-Ali, under the personal escort of Sheik Ali, in forty-three days, with seven other companions and nine camels, and reached Timbuctoo, where he was treated with great distinction, and which place he reports having lost some of its importance as a market, and, from his hurried observation, the place appeared thinly peopled, now scarcely containing more than 20,000 inhabitants (Hadj-Ali estimates the population at 50,000), and many of its houses in ruins.

Dr. Lenz took three months to reach St. Louis, Senegal. The temperature rarely rose, even in the hot season, above 36 degrees Celsius.

Toward the end of his fatiguing journey, he was menaced by one of the tribes, but was saved by his interpreter's tact. He found in several oases, points which may be of great utility for the Sahara Railway, which French expeditions are preparing by military surveys from Senegal and Algeria simultaneously.

Mr. Gallieni has been exploring the basin of the Senegal from the sea coast of Ségon. Mr. Gallieni reports that a fresh map of the country lying between the Senegal and the Niger will have to be drawn, as the one now in use is altogether misleading. The watershed of the two basins is near Bamakon, only a few miles from the Niger, and at some points the line of separation is so vague that during the rainy season the water sometimes drains into the Senegal and at other times into the Niger; this being the reason why the natives maintain that the two rivers are connected

during the winter. As the basin of the Niger is only a few miles wide, the tributary streams indicated on the maps cannot empty themselves into that river, all of them finding their way into the Senegal. Mr. Gallieni and his companions have obtained some interesting information concerning the Bouré, which has long enjoyed the reputation of possessing great mineral wealth ; and it appears that this district comprises ten villages, with six thousand inhabitants, one thousand of whom are occupied in gold mining, the value of the quantity extracted in their primitive way in a year being about \$150,000. Although the mission was attacked at Dio, Mr. Gallieni reports very favorably as to the attitude of the natives through whose territory the railway from the Senegal is intended to run, and says they are well disposed toward France.

From the mountain chain of Morocco to Timbuctoo the desert of Sahara forms one vast horizontal plateau, and is not broken up into depressions of ground, as was generally believed ; this plateau continuing beyond Timbuctoo and skirting the left bank of the Niger.

On account of Morocco, the Spaniards watch anxiously the progress of the French in the Sahara.